

**BY ORDER OF THE COMMANDER
445TH AIRLIFT WING**

**445TH AIRLIFT WING INSTRUCTION
21-103**



1 NOVEMBER 2012

Maintenance

***FUNCTIONAL CHECK FLIGHT (FCF)
OPERATIONAL CHECK FLIGHT (OCF)
HIGH SPEED TAXI CHECKS INFLIGHT
OPERATIONAL CHECKS***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 445 MXG/MXQ

Certified by: 445 AW/CCE
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Supersedes: 445AWI21-103,
25 February 2009

Pages: 4

This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. It establishes procedures for the control of the Functional/Operational Check Flight (FCF/OCF) and High Speed Taxi Programs. It applies to the Operations Group Commander (445 OG/CC), 89 Airlift Squadron (89 AS), Airfield Management, Command Post (445 AW/CP), Maintenance Operations Squadron (445 MOS), and the Maintenance Group (445 MXG) aircraft maintenance activities. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force Information Management Tool (AF IMT) 847, *Recommendation for Change of Publication*; route AF IMTs 847 from the field through the appropriate functionals chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://afrims.amc.af.mil/>.

SUMMARY OF CHANGES

This instruction has been revised to update the requirements for Inflight Operational Checks and to identify the office to contact at Robins AFB, GA to coordinate FCF and High Speed Taxi checks. C-17A specific information has been added to identify process to request Boeing FCF crews; the 445 AW doesn't expect to have FCF qualified crews during C-5A to C-17A conversion.

1. General Procedures. The 445 MXG Quality Assurance (445 MXG/MXQ) and 445th Aircraft Maintenance Squadron (445 AMXS) or 445th Maintenance Squadron (445 MXS) Superintendents will evaluate aircraft maintenance activities to determine if a Functional Check Flight (FCF) or Operational Check Flight (OCF) is required before returning an aircraft to regular service. Aircraft being recovered from cannibalization status, Isochronal Inspections, and/or Contract Field Team repair will be evaluated to determine if a FCF or OCF is required based on the type and degree of maintenance.

2. Functional Flight Check (FCF) Procedures.

2.1. FCF's will be conducted as determined by requirements in TO 1-1-300, *Acceptance/Functional Check Flights and Maintenance Operational Checks*, 1C-17A-6 *Aircraft Scheduled Inspections*, and as directed by the 445th Maintenance Group Commander (445 MXG/CC). AFI 21-101 FCF/OCF requirements and restrictions will be reviewed.

2.2. The Wright-Patterson AFB (WPAFB) aircrews are not qualified to perform C-17A FCFs. If it becomes necessary to accomplish an FCF at WPAFB, the 445 MXG/CC will request 445th Maintenance Operations Flight, Plans, Scheduling and Documentation (445 MOS/MXOOS) office to coordinate/schedule a FCF crew.

2.3. For C-17A FCF's: Contact Boeing using an expedited 107 to request a FCF crew. Boeing will provide a flight crew under the current Flex Sustainment Contract for any FCF required at WPAFB. Process is to submit a 00-25-107 Support Request by e-mail from the Wing (through 445 MOS/MXOOS), approved by MAJCOM (AMC/A4M and AFRC/A4M) and forwarded to C-17 ASC/WLML-MX-MOD. Send informational copy of request to 4AF/A4M.

2.4. The 445 MXG/MXQ office and the applicable maintenance flight chief will serve as the focal point to brief the FCF aircrew on matters concerning the discrepancies and/or conditions prompting the necessity of the FCF.

2.5. The 445 MXG/MXQ will use the QANTTAS program FCF feature to document historical information on all FCFs.

3. Operational Check Flight (OCF) Procedures.

3.1. Current C-17A technical orders do not contain any OCF requirements or procedures. An OCF, as defined in 1-1-300 paragraph 4.1.4, is a check flight conducted after maintenance to ensure aircraft mission specific equipment is operational and the aircraft is mission ready. Should an OCF be required/directed the following procedures will apply.

3.2. An OCF will be conducted as determined by requirements in Time Compliance Technical Orders (TCTOs), 1C-17A-6 Technical Order, and/or as directed by the 445 MXG/CC.

3.3. The 445 MXG/MXQ Supervisor and the applicable maintenance flight chief will serve as the focal point for contact between the 445 MXG and the 445th Operations Group (445 OG) to discuss requirements of an OCF. On the day of the OCF, a member of the 445 MXG/MXQ Office will brief the OCF aircrew on the requirements for the OCF and/or conditions prompting the need for the OCF.

3.4. The 445 MOS/MXOOS Supervisor will provide the 89 AS and 445 OG/OGV a minimum of 24 hours notification to enable scheduling of the most qualified aircrew to

complete the required checks. The 445 MOS PS&D Supervisor will coordinate and schedule the OCF with the 445 OG/CC.

3.5. The 89 AS will coordinate with 445 OG/OGV to assign a qualified aircrew to accomplish the required OCF.

3.6. The 445 MXG/MXQ will use the QANTTAS program OCF feature to document historical information on all OCFs.

4. High Speed Taxi Check Procedures.

4.1. The 445 MXG/CC will determine if High Speed Taxi Check is required. If deemed necessary, high speed taxi check will be performed by a qualified FCF aircrew utilizing TO 1C-17A-6CL-1.

4.2. The aircraft forms will be processed through QA using FCF procedures.

4.3. The QA will brief the aircrew prior to high speed taxi checks, to include the required FCF briefing items and pertinent warnings, cautions, etc.

5. Inflight Operational Checks.

5.1. Inflight Operational Checks are accomplished at the request of maintenance to validate a maintenance action that cannot be fully verified on the ground and will be coordinated with the 445 MXG/MXQ Office.

5.2. The 445 AMXS or 445 MXS will contact the 445 MOS PS&D to schedule the inflight operational check through 445 OG or aircraft commander.

5.3. The 445 MXG/MXQ Office and the applicable maintenance flight chief or production superintendent will serve as the focal point to brief the 89 AS aircrew on matters concerning the discrepancies and/or conditions prompting the necessity of the In-flight Operational Check.

STEPHEN D. GOEMAN, Col, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 21-1, *Air and Space Maintenance*

AFMAN 33-363, *Management of Records*

AFI 21-101, *Aircraft and Equipment Maintenance Management*

TECHNICAL ORDER 1-1-300, *Maintenance Operational Checks and Check Flights*

TECHNICAL ORDER 1C-17A-6, *Scheduled Inspections and Maintenance Requirements*

TECHNICAL ORDER 1C-17A-6CL-1, *Acceptance and Functional Check Flight Checklist*

TECHNICAL ORDER 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*

TECHNICAL ORDER 00-25-107, *Maintenance Assistance*

Adopted Forms

AF IMT 847, *Recommendation for Change of Publication*